

۱۶۳



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/804,409B

DATE: 06/25/2003
TIME: 16:19:06

Input Set : A:\0278721.APP.txt
Output Set: N:\CRF4\06252003\I804409B.raw

3 <110> APPLICANT: ENGENE, INC.
4 KIEFFER, TIMOTHY J.
5 CHEUNG, ANTHONY T.
7 <130> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR REGULATED PROTEIN
8 EXPRESSION IN GUT
10 <130> FILE REFERENCE: 029996/027 8721
12 <140> CURRENT APPLICATION NUMBER: 09/804,409B
13 <141> CURRENT FILING DATE: 2001-03-12
15 <160> NUMBER OF SEQ ID NOS: 19
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 19
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
24 <210> FEATURE:
25 <213> OTHER INFORMATION: Description of Artificial Sequence: Primer
27 <400> SEQUENCE: 1
28 ccaccccgccg cttttgtga 13
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 21
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
36 <210> FEATURE:
37 <213> OTHER INFORMATION: Description of Artificial Sequence: Primer
39 <400> SEQUENCE: 2
40 gttttttttt tttttttttt tg 22
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 19
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
48 <210> FEATURE:
49 <213> OTHER INFORMATION: Description of Artificial Sequence: Primer
51 <400> SEQUENCE: 3
52 accaccggcc cttaatgtat 13
55 <210> SEQ ID NO: 4
56 <211> LENGTH: 22
57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial Sequence
60 <210> FEATURE:
61 <213> OTHER INFORMATION: Description of Artificial Sequence: Primer
63 <400> SEQUENCE: 4
64 ctgttttgccag tttttttttt ccgc 22
67 <210> SEQ ID NO: 5

ENTERED

1

2

1

2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/804,409B

DATE: 06/25/2003

TIME: 16:19:06

Input Set : A:\0278721.APP.txt

Output Set: N:\CRF4\06252003\I804409B.raw

68 <211> LENGTH: 1319
 69 <212> TYPE: DNA
 70 <213> ORGANISM: Mus musculus
 71 <400> SEQUENCE: 5

73 ccggaaattac ccactaacgtt ggaattstat aagggttggg tttgtctgtt tgtttacagc 60
 74 tcgcgttttg gcaccccgca cagctgagtg gttataagcc caegtcgatg cttaacacat 110
 75 qtttgttcaa tgaatacacacg cgaagccggt ttcatttag gggcatgagt aggccagaggt 180
 76 gtggggcaggg aaaaaaaaaa agggaaaaaca ggtgcggaca gaaaggaggg gctctgaagg 240
 77 atgcggcgtca gtgcacaaact gtcataccaga taccagggtt actgtggccc taggcccagg 300
 78 tgcacggggcc ttccatgtt gtctgcggccag ggtgagagca gaactgcgggt gggccggggca 360
 79 gaaaggaaacc aaccaggaaag cagggttgcg cccaaattat ccaggttta agtacattt 410
 80 aagagacaagg ctgggtgtt gaaggtcaga ggtgtccctg gggtgtcttga ctaggactga 480
 81 ccacttctgt tttagtttaa tggtgagaaac tgcctcacaac tgcatactgc tttaacttgc 540
 82 ctttgcggcgc tggcggccca ggacccaccc atgtgtgggt tggacccctca gtcacacac 600
 83 gaaacgtgtgt gaaaggccactg gttgtcagag caggcttc ggcactgagg aagcactgtac 660
 84 cactatcccc taaaataataa caattaaataa cacacagaat gcgaggccaca caactgagtt 720
 85 tcaggagagg cttcgccatg gcaagggggtt caagagggtt ctgtggggacc cgctggatgt 780
 86 tccacgggatg tcataaagat gggcgtgcct ccagccaaat gaaatcaaga gaaaagttacg 840
 87 cggaaatgtatg gaaaaacttcg cagtcgtggag aggtaaaatag gggagggatc cgaggctcag 900
 88 agacaggagt gacttgcggca cggacgcaca gcaagttggc aggtggagtt cagctgtgcc 960
 89 accttcgttca cgggggtacc ttatcagcc accagatatac agcgggatag agacagctga 1020
 90 tggagaagctt ggagggtgggg ggcggggccccc gaaagggtggg gaaaggggcc ggggggggggg 1080
 91 tcctatgtac taatttcgtt ggtgtgtgcg cggtgtgcg tgcgtgtgcg ttttatataaa 1140
 92 gcccggccata gttttgttgc tgcgtggcc gcccacccca ccatcaccgc ttttaccacc 1200
 93 acggctactg cactttccccc gttgtgtcag agctttgttgc gccagactac agacccactc 1260
 94 cccgcataatc ctttcgtccact ttccggccac cgtccgggtc gctatgcgc 1319

97 <210> SEQ ID NO: 6
 98 <211> LENGTH: 1760
 99 <212> TYPE: DNA
 100 <213> ORGANISM: Mus musculus
 102 <400> SEQUENCE: 6

103 gggaaacttc ttcgtgtttt tcatttagggg cccgtgttcc catctaatacg ctgactgtga 60
 104 gcatccacctt ctgtgtttcc caggccactgg cttatgttca caagagacag ctatataagg 120
 105 qtctttgtca gaaaaatttt ctggccatag caatagtgtc tgggttttgtt ggttgtatata 180
 106 gggctggatc cccgggtggg gcaatgttcc gatggttttt cttccgtct tagtccaaaa 240
 107 ctttgcgttctt gtaacttcctt ccatgggtac ttgtttcc attctaaagaa ggagccaaatg 300
 108 atccacaccc ttccatccctt ttccatccctt gagtttgcg aatgccacaa aactttccaaa 360
 109 cccttcgtaa tagccttcctt ttttagtgcctt tccaatgtat attaaaataaa tctattttc 420
 110 atccccatcg attaaagcc ttttaaagcc agaaaaactat attcattttt ttccatccccc 480
 111 agtagttcac aaactatcg gcaatgtataa agcatcataa ctcagtttgtt gggtagataa 540
 112 aatggaaatg tgattgttca gtcagcagag acttttagag gacccatatac aacaagattc 600
 113 ttcagttctt cagaaatata tttcagttata tacagggtta gaggactcac atctttaata 660
 114 aatataaaggta aaaaatttag acctgtataaa attattaagg tacatatacg agtccacgg 720
 115 ccaaggatcag ccatgggtat gaattataaa tccaaagaagc ggtgggttaa ctctgacatt 780
 116 gttccatttgcg tggttctat tcattgttgcgt tagtcaccc acatctactca accaaaaaccc 840
 117 agaagtattt ctgtgttactt atgttctt gatgccaaga gggctctagg catatgaaaa 900
 118 ttcctcaatc tcctccctc tcctccccc ttccacccccc actctcttc ttcttagcagt 960
 119 aatccctccc ttcttgcgttgc gcaatgtttt ttttggagca cagtttgcgttgc gctatcttt 1020
 120 gcaacacaccc attttgcgttgc agatttgcgttgc ggcctccatatac acaacttgcg 1080

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/804,409B

DATE: 06/25/2003
TIME: 16:19:06

Input Set : A:\0278721.APP.txt
Output Set: N:\CRF4\06252003\I804409B.raw

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/804,409B

DATE: 06/25/2003

TIME: 16:19:07

Input Set : A:\0278721.APP.txt

Output Set: N:\CRF4\06252003\I804409B.raw

173 gaatccacga cgtggataga tacttctgtt tgatgcaga cactatttat cagggttgtaa 1780
 174 cttgagcaga acttgatgtt taacttgtt ggaacacaa cacccttggc aaacaasaga 2040
 175 ttacttagata ttttaqatga aataataaaa tactttccac aactgtatagg taggaaacag 2100
 176 ttcaatagta atataattat tgaacaaata atccctaaaaa gaagaaatcc agaggaatag 2160
 177 caagtttggg gaagagaggg tttgtgttgtt tttgtgttgtt cgcacattta tagccaaaat 2220
 178 agatgtata cttaaatgtaa catgcataa aaaaacatta ttttgcatac agtttacata 2280
 179 tttttatgtaa tactttaaaaa aaaaacatgt ggattttggaga gaaatggctc agtggtaag 2340
 180 ttttttatcc ctagcaacca catgattgtt cacaaccatc tttttttttt tttttttttt 2400
 181 tttttttgtta tttttttgtta aagtgtacgtt gtactttataa ttataatataa ataaatatttt 2460
 182 aaaaaaaaatccatataat ttcaacacaa gatatgttctt gttttttttt tttttttttt 2520
 183 aaaaaatggaa acacacagsg tttttttttt gttttttttt gttttttttt tttttttttt 2580
 184 gttttttttt aatggaaagg gaaaagaaaga gacaagcaac aag 2640
 185 SEQ ID NO: 8
 186 LENGTH: 226
 187 TYPE: DNA
 188 ORGANISM: Homo sapiens
 189 SEQUENCE: 8
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 99

RAW SEQUENCE LISTING

DATE: 06/25/2003
TIME: 16:19:07

Input Set : A:\0278721.APP.txt
Output Set: N:\CRF4\06252003\I804409B.raw

237 tggagctggg cggggccctt ggtgcaggca gctgcagcc cttggccctg gaggggttccc 300
 238 tgcaagaatcg tggcattgtg gaacaatgt gtaccagcat ctgcctccctc taccagctgg 360
 239 agaactactg caactagaacg cagccccggc gcagcccccc accccggccgccc tcctgcacccg 400
 240 agagagatgg aataaageccc ttgaaccaggc 450
 243 <210> SEQ ID NO: 11
 244 <211> LENGTH: 167
 245 <212> TYPE: PRT
 246 <213> ORGANISM: Homo sapiens
 248 <400> SEQUENCE: 11
 249 Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu 300
 250 1 5 10 15
 252 Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys 360
 253 20 25 30
 255 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr 400
 256 35 40 45
 258 Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro 450
 259 50 55 60
 261 Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala 500
 262 65 70 75 80
 264 Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln 550
 265 85 90 95
 267 Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala 600
 268 100 105 110
 270 Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu 650
 271 115 120 125
 272 Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val 700
 274 130 135 140
 276 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln 750
 277 145 150 155 160
 279 Leu Asp Leu Ser Pro Gly Cys
 280 165
 283 <210> SEQ ID NO: 12
 284 <211> LENGTH: 3408
 285 <212> TYPE: DNA
 286 <213> ORGANISM: Homo sapiens
 288 <400> SEQUENCE: 12
 289 tctgtttca ggccaaagaa gcccattctg ggaaggaaaa tgcattgggg aaccttgtgc 60
 290 ggattttgtt ggtttttggcc cttatctttt tatgtccaaag ctgtgcctat ccaaaaaggc 100
 291 caagatgaccc cccaaaacctt catcaagaca attgtcacca ggatcaatga catttcacac 140
 292 aacgcgttcag tcttctccaa acagaaaaatgc acgggtttgg acttcattcc tgggtccac 240
 293 cccatcttgc ctttatccaa gatggaccag acactggcag tctaccaaca gatccctcacc 300
 294 atgtatgcctt ccagaaaacgt gatccaaata tccaaacggacc tggagaacctt ccgggatctt 360
 295 cttcacgtgc tggccttctc taagagctgc cacttgcctt gggccagtgg ctctgagacc 400
 296 ttggacagcc tgggggggtgt ccttggaaatgt tcaggctact ccacagaggt ggtggccctg 480
 297 aacaggctgc aagggtttctt ccaggacatg ctgtggcago tggacccatgc ccctgggtgc 540
 298 tgaggccttg aaggtaactt ttcctgcacg gactacgtt aaggaaaggaa ctctggcttc 600
 299 caggatctc caggattgaa gagcattgc tggacacccc ttatccagga ctctgtcaat 660
 300 ttcctgtact cctctaagcc actttccaa aggccataaga ccctaagcc ctctttgttt 710
 301 gaaaccaaag atatatacac accatcttat ttcacccagg aqqqqqgtcc acccaqcaaa 780

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/804,409B

DATE: 06/25/2003

TIME: 16:19:08

Input Set : A:\0278721.APP.txt

Output Set: N:\CRF4\06252003\I804409B.raw